105,747

Application Date : 6th Oct., 1937. No. 4273/37.

Applicant (Actual Inventor) .. .. CLIVE NEWTON WAWN.
Application and Provisional Specification Accepted, 11th November, 1937.
Complete Specification after Provisional Specification Lodged, 5th August, 1938.
Complete Specification .. .. .. Accepted, 7th November, 1938.
Acceptance Advertised (Sec. 50) .. 17th November, 1938.

Classes 58.3 ; 81.9 ; 81.8.

Drawing attached.

COMPLETE SPECIFICATION.

"Improvements in and relating to gates."

I, CLIVE NEWTON WAWN, of "Dinjerrah", Langkoop, via Casterton, in the State of Victoria, Commonwealth of Australia, grazier, hereby declare this invention and the manner in which it is to be performed, to be fully described and ascertained in and by the following statement:—

This invention has reference to improvements in and relating to gates and the like and has been devised to provide a gate comparatively cheap to manufacture and simple and efficient in operation and is particularly adaptable for use on farms or stations.

Hitherto improvised gates of a flexible nature have been known but such gates are usually constructed of a plurality of wires held in spaced relationship by battens, the difficulty in all such types of gates being the inefficient means by which the gate is supported in a closed position it being impossible and inconvenient to tighten the flexible wires and thereby prevent same from sagging.

The main object of the present invention is to provide a gate of a flexible nature and means for straining same, when closed, to a taut position such means also being applicable to straining wires of a fence.

In describing the invention I will refer to its use in conjunction with a flexible gate but it will be readily understood that the invention is similarly applicable to straining wires of a fence since the same type of mechanism would be employed.

With the above object in view the present invention consists in a flexible gate comprising a plurality of parallel wires having their ends terminating in or around respective vertical supports spaced a suitable distance apart, according to requirements, suitable intermediate droppers being provided to retain the wires in spaced relationship, one vertical support being fixed to a post of an adjoining fence by suitable anchoring means while the other vertical support is connected by flexible metal lacing to a metal rod forming a winding element the said rod being detachably mounted to the opposite gate post and adapted to be rotated so as to cause the wires of the construction to be tightened, means being provided for retaining the rod in determined position after the wires have been tightened or strained to a desired tension.

An important feature embodied in my invention is the equalising effect of the

6408.—1/12/38.—155.—Price, 1s. 6d. post free.

strain on the gate posts and stays caused by the pull of the adjacent fencing wires.

Another important feature in the invention is the adjustability of the winding mechanism enabling the operator to obtain a desired and even tension on the wires forming the gate or fence as the case may be.

A further important feature in the invention is that the full set of wires forming the gate or fence may be all strained or tightened in the one operation.

A still further important feature in the invention is the lightness and compactness of the appliance when employed as a flexible gate enabling same to be readily transported.

Other features of this invention will be described hereinafter with reference to the accompanying drawings in which:—

Figure 1 is an elevation of a gate assembly constructed in accordance with the invention, portion of the gate being removed.

Figure 2 is a sectional plan view through line 2—2 of Figure 1.

Figure 3 is an enlarged elevation partly in section of the upper portion of the gate at the operating end.

Figure 4 is a sectional plan view through line 4—4 of Figure 1.

Figure 5 is an enlarged elevation partly in section of the upper portion of the gate at the anchored or closed end.

According to one form of carrying my invention into practical effect I provide a flexible gate comprising a plurality of wires 6 of desired length to suit requirements and held in spaced parallel relationship by suitable droppers 7, the ends of each wire 6 being fixed to respective vertical supports 8 and 9 in any desired manner one of the said supports 8 being anchored to a post 10 of an adjoining fence by suitable anchoring bolts 11. The other support 9 is provided with and has fixed at its top and bottom a flexible metal lacing 12, which connects with a metal rod 13 having a cranked handle 14 at its top, or the said handle 14 may be detachable if desired. The rod 13 acts as a winding element and is adapted to detachably engage with hooks 15 anchored to the gate post 16 adjacent the opening end of the gate.

Mounted to the rod or winding element 13 at a position immediately above the upper anchoring hook 15 when the said rod 13 is in the winding position is a ratchet wheel 17 adapted to engage a pawl 18 pivotally mounted to said upper anchoring hook 15, the said pawl 18 being adapted to retain the rod 13 in determined position during or after the winding operation a stop 19 being provided to limit the movement of said pawl 18 and thereby keep same in contact with the ratchet wheel 17 when desired.

Each of the anchoring bolts 11 and anchoring hooks 15 pass through the respective gate posts 10 and 16 and are anchored thereto by means of a pin 20 and washer 21 or other suitable means, a plurality of holes 22 being provided in the anchoring members 11 and 15 for adjustment purposes to suit posts of various sizes.

As before mentioned the respective flexible metal lacing bands 12 are fixed to the winding rod 13 and the adjacent support 9 and on the rotation of the rod or winding element 13 the said lacing 12 is wound around said rod 13 causing the wires 6 forming the gate construction to be tightened to a desired degree on the completion of which winding, the pawl 18 is brought into contact with the ratchet wheel 17 for the purpose of retaining the rod 13 in a wound position.

In a modified form of construction the flexible gate may comprise two parallel steel cables which form the top and bottom members the intermediate space between said members being covered with battens or any well known fencing material, for example the fencing material known as "ringlock" or "weldmesh" could be employed.

In lieu of the construction being employed as a flexible gate the construction may form a fence of desired length in which latter case the winding element or rod 13 is devoid of the cranked handle 14 and in lieu thereof a detachable handle (not shown) is provided and adapted to engage a square or other formation on the top of the rod 13.

Having now fully described and ascertained my said invention and the manner in which it is to be performed I declare that what I claim is:—

1. Means for placing and retaining a tension simultaneously on all the horizontal wires of a flexible gate or wire fence comprising a vertical rod or winding element adapted to detachably and rotatably engage

with hooks a[illegible]red to a fixed post the said rod hav[illegible] connected thereto in a direct or indirect manner one end of each of the horizontal wires of the gate or fence the other ends of said wires being anchored to a further post, a ratchet wheel or the like fixed to the winding element, a pivoted pawl on the anchoring hook or post and adapted to engage the teeth of the wheel to prevent the winding element unwinding after the wires have been tightened and means for rotating the rod or winding element.

2. Means for placing and retaining a tension simultaneously on all the horizontal wires of a flexible gate or wire fence comprising a rod detachably and rotatably supported on and adjacent to a fixed post, the said rod being connected to all of the horizontal wires forming the gate or fence and having a ratchet wheel fixed thereto, a pivoted pawl adjacent the ratchet wheel and adapted to engage the teeth of said wheel to prevent the rod unwinding after it being rotated to impart a tension to all said wires, means being provided for anchoring the other ends of the wires to a co-acting post.

3. Means for placing and retaining a tension simultaneously on all the horizontal wires of a flexible wire gate or wire fence comprising a vertical rod detachably and rotatably disposed in anchoring hooks adjustably mounted to a fixed post, the said rod being connected by metal lacing or the like to a vertical support fixed to one end of all the horizontal wires forming the gate or fence, the other ends of the said wires being fixed to a corresponding support anchored to a co-acting post, ratchet and pawl means associated with the vertical rod to permit said rod to be rotated to impart a predetermined t[illegible]n simultaneously to all the horizontal wires and to maintain such tension at the will of the operator, means being provided for rotating the rod.

4. Means for placing and retaining a tension simultaneously on all the horizontal wires of a flexible wire gate or wire fence comprising a winding element detachably and rotatably supported to a fixed post the said winding element on being rotated imparting a tension simultaneously to all of the horizontal wires forming the gate or fence, ratchet and pawl means associated with said winding element to prevent at the will of the operator the unwinding of said element while means are provided for anchoring the other ends of the wires to a co-acting post.

5. Means for placing and retaining a tension simultaneously on all the horizontal wires of a flexible wire gate or wire fence according to Claim 3 and wherein the metal lacing connecting the vertical rod to the adjacent vertical support comprises two flexible straps, one near the upper and one near the lower end of the support, the respective ends of each strap being connected to the rod and the support so that on the rotation of the rod the straps draw the support towards the rod and thereby place a tension on the horizontal wires.

6. Means for placing and retaining a tension simultaneously on all the horizontal wires of a flexible wire gate or wire fence constructed and operating substantially as herein described with reference to the accompanying drawings.

Dated this 4th day of August, 1938.

A. T. MADDEN,
Patent Attorney for Applicant.

Witness—V. L. Buxton.

Printed and Published for the DEPARTMENT OF PATENTS, COMMONWEALTH OF AUSTRALIA,
by L. F. JOHNSTON, Commonwealth Government Printer, Canberra.

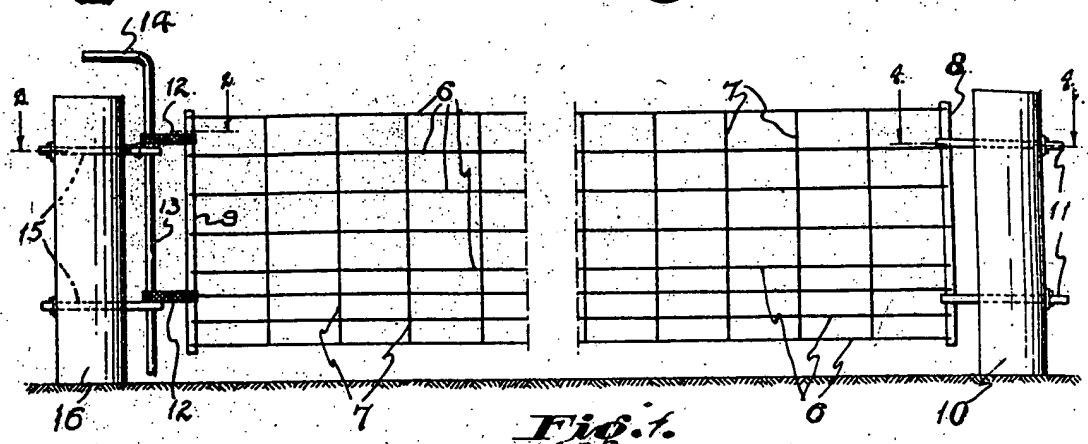

Fig. 1.

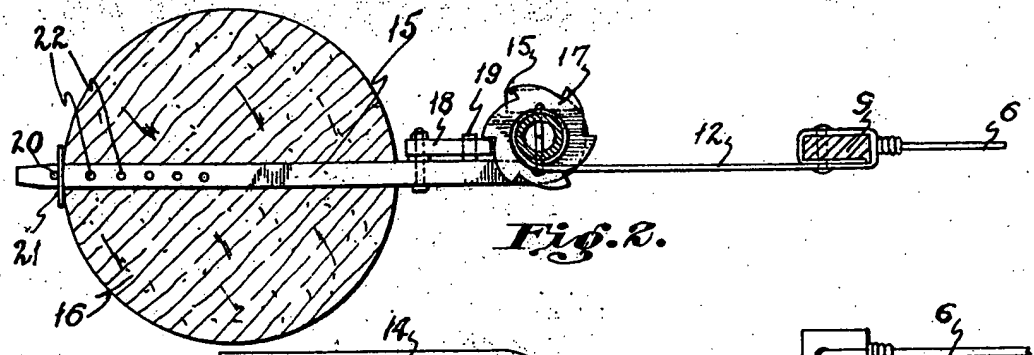

Fig. 2.

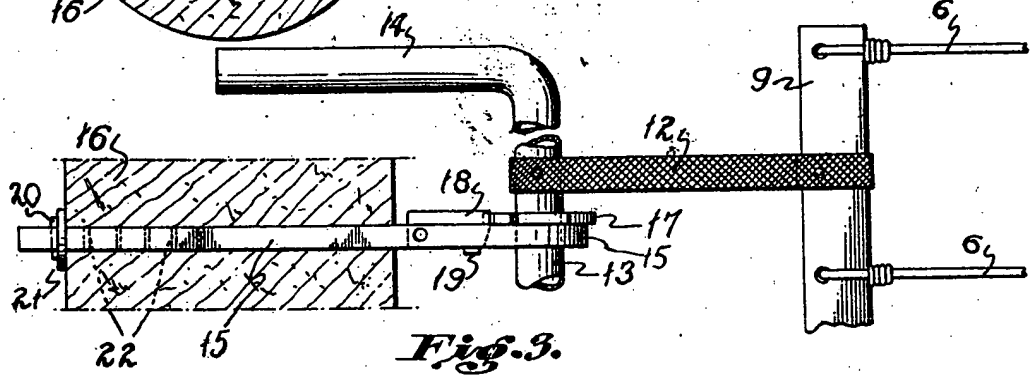

Fig. 3.

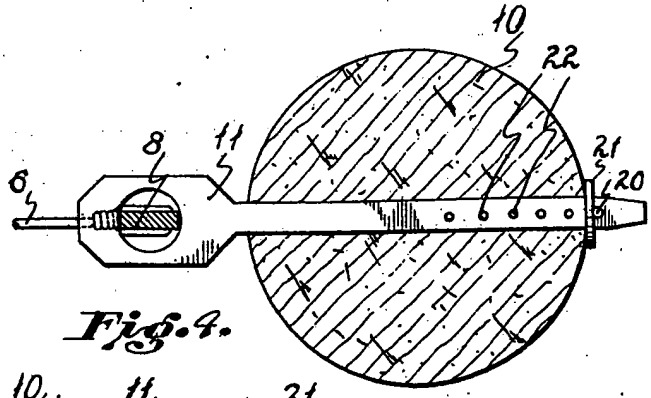

Fig. 4.

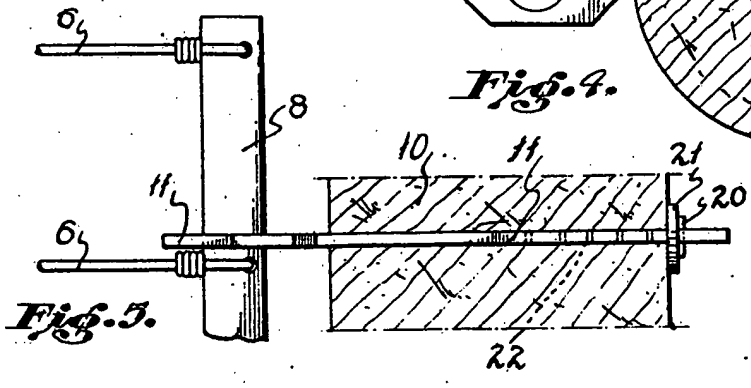

Fig. 5.